The Analog Signal Processing (ASP) Technical Committee serves to foster research, development, education and industrial dissemination of knowledge relating to the theory, analysis, design, and practical implementation of analog circuits. The scope of the ASP Committee spans from basic scientific theory to industrial application. More information on this committee can be found on the world-wide web at http://ewh.ieee.org/soc/icss/committees/asptc.

Committee members are experts in the analog signal processing arena who are committed to and active within this field. The committee currently has about 45 active members. In 2005, Un-Ku Moon took over from Igor Filanovsky as chair. Tony Chan Carusone serves as the chair-elect and Felix Lustenberger serves as the secretary and web coordinator.

The following summarizes CASS-related activity by the ASP committee and its members during the year 2005-2006.

1. **ISCAS 2006**

The Analog Signal Processing (ASP) track will once again play a dominant role in ISCAS 2006 (http://www.iscas06.org), and a great majority of ASPTC members assisted in the preparation of the technical program as well as paper evaluations. During the last ASPTC meeting in Kobe, Japan (at ISCAS 2005 http://www.iscas05.org), Tony Chan Carusone was nominated and elected by the committee as the new chair-elect and Felix Lustenberger was also nominated and elected by the committee as the new secretary (also web coordinator). In the following year, as Tony Chan Carusone is to serve as the chair, Felix Lustenberger will serve as the chair-elect. New secretary will be nominated and elected at our upcoming ASPTC meeting in Kos, Greece (at ISCAS 2006).

As we have done in the past, once again for ISCAS 2006, current ASPTC chair Un-Ku Moon, chair-elect Tony Chan Carusone, and last year’s chair Igor Filanovsky acted as Analog Signal Processing track co-chairs. These three coordinated the reviews of the papers submitted to this track. 437 papers (= 18% of all papers submitted to ISCAS 2006) were submitted to the Analog and Signal Processing track, of which 252 papers (= 57%) were selected for the final program.

The ISCAS 2006 review process for the ASP track went smoothly without a hitch, and this is primarily due to the service of Review Committee Member (RCM) volunteers, as listed below:

*Analog Signal Processing RCMs:*

- Albert Wang, Illinois Institute of Technology, USA
- Alyssa Apsel, Cornell University, USA
- Andreas Demosthenous, University College London, UK
- Antonio Lopez-Martín, Public University of Navarra, Spain
- Antonio Torralba, University of Sevilla, Spain
- Apisak Worapiseth, Mahanakorn University of Technology, Thailand
- Aydin Karsilayan, Texas A&M University, USA
- Degang Chen, Iowa State University, USA
Many ISCAS 2006 technical sessions will be chaired by ASPTC members, as listed below:

**Sessions sponsored by Analog Signal Processing:**

- Amplifiers I: Igor Filanovsky
- Wireless Circuits & Systems II: P R Mukund
- Nyquist DACs: Shahriar Mirabbasi
- Analog Circuits & IC Technology I: Antonio Lopez-Martin
- Bandgap References: Hoi Lee
- Oversampling Converters I: Gordon Roberts
- Pipelined ADCs I: Degang Chen
- Continuous-time Filters I: Yichuang Sun

2
Nyquist ADCs I
Log-domain & Complex Analog Signal Processing
Low Voltage Amplifiers
Analog Circuits & IC Technology II
Oversampling Converters II
PLLS, ADCs, and Testing
Circuit Theory I
CAD & Tools for Analog Design I
Oversampling Converters III
Phase Locking
Mixed Signal Circuits & Testing I
Analog Circuits & IC Technology III
Nyquist ADCs II
Sensor & Actuator Interface Circuits
Oversampling Converters IV
Switched Capacitor Circuits
Wireless and Oversampling Circuits & Systems
Pipelined ADCs III
Oversampling Converters VI
Analog Circuits & IC Technology IV
Circuit Theory II
Amplifiers II
Amplifiers III
Mixed Signal Circuits & Systems
Analog Circuits & IC Technology V
Oversampling Converters V
Circuit Theory III
Analog Filtering & Signal Processing
Amplifiers IV
Voltage & Current References
Analog Circuits & IC Technology VI
Continuous-time Filters II
Circuit Theory IV
Continuous-time Filters III
Analog Circuits & IC Technology VII
Wireless Circuits & Systems III
Oversampling Converters VII
Nyquist Circuits & Systems
CAD & Tools for Analog Design II
Pipelined ADCs II
Mixed Signal Systems & Tools
Mixed Signal Circuits & Testing II

Ramon Carvajal
Eduard Alarcon
Vadim Ivanov
Gert Cauwenberghs
Luis Hernandez
Alyssa Apsel
Andreas Demosthenous
Tuna Tarim
Paul Hasler
Wouter Serdijn
Joseph Chang
Gu-Yeon Wei
Sameer Sonkusale
Orly Yadid-Pecht
Antonio Torralba
Roman Genov
Tony Chan Carusone
Felix Lustenberger
Tertulien Ndjountche
Alyssa Apsel
Ramesh Harjani
Vadim Ivanov
Igor Filanovsky
Paul Hasler
Antonio Lopez-Martín
Luis Hernandez
Randy Geiger
Roman Genov
Antonio Torralba
Spain
Gabriel Rincon-Mora
Randy Geiger
Yichuang Sun
Andreas Demosthenous
Ralph Etienne-Cummings
Sameer Sonkusale
P R Mukund
Tertulien Ndjountche
Felix Lustenberger
Tuna Tarim
Gordon Robertsity
Degang Chen
Joseph Chang

Other activities:
TPC members: Tony Chan Carusone, Igor Filanovsky, Un-Ku Moon
Tutorial presenters: John Choma, Andreas Demosthenous
Special Sessions (Sensory Systems) organizer: Ralph Etienne-Cummings
Demonstration Sessions (Sensory Systems) organizer: Ralph Etienne-Cummings
2. Other conferences and meetings

Members of ASPTC are active in organizing and coordinating many other conferences and meetings in the CAS field. This is summarized in the following.

IEEE CASS Board of Governors
   Tuna Tarim, Ralph Etienne-Cummings, Wouter Serdijn

IEEE SSCS representative to IEEE CASS Board of Governors
   Un-Ku Moon

IEEE CAS representative to IEEE Sensors Council
   Orly Yadid-Pecht

IEEE BCTM
   Rob Fox, Technical Program Committee

IEEE CICC
   Tony Chan Carusone, Technical Program Committee
   Ramesh Harjani, Technical Program Committee
   Un-Ku Moon, Technical Program Committee
   Shahriar Mirabbasi, Technical Program Committee

2005 Wireless Test Workshop,
   Bill Eisenstadt, Technical Program Co-Chair

ARFTG
   Bill Eisenstadt, Executive Committee

Symposium on Integrated Circuits and Systems Design
   Jose Silva-Martinez, Technical Program Committee

IASTED International Conference on Circuits Signals and Systems
   Jose Silva-Martinez, Technical Program Committee

Mexican Symposium on Instrumentation
   Jose Silva-Martinez, Technical Program Committee

NSF Telluride Neuromorphic Engineering Workshop
   Ralph Etienne-Cummings, Organizer

IEEE ISSCC
   Ralph Etienne-Cummings, Technical Program Committee

SPIE, BIS, NIPS, COSI
   Ralph Etienne-Cummings, Technical Program Committee

SPIE Solid State Sensor Arrays International Conference
   Orly Yadid-Pecht, Technical Program Committee

IEEE workshop on CCDs and Advanced Image Sensors
   Orly Yadid-Pecht, Technical Program Committee

IEEE Int. Conf. on Portable Information Devices
   Ramesh Harjani, Tutorial co-chair
3. Editorial boards and publications

Members of ASPTC are active on editorial boards of IEEE and CAS-related journals and transactions, and in promoting ASP and CAS in other publications:

Editorial boards

IEEE Transactions on Circuits and Systems I:
- Deputy Editor in Chief: Orly Yadid-Pecht
- Associate Editor: Igor Filanovsky, Tuna Tarim, Jose Silva-Martinez, Alyssa Apsel, Wouter Serdijn, Joseph Chang

IEEE Transactions on Circuits and Systems II:
- Associate Editor: Gaetano Palumbo, Alyssa Apsel, Gu-Yeon Wei, Andreas Demosthenous, Wouter Serdijn

Analog Integrated Circuits and Signal Processing
- Associate Editor: John Choma, Wouter Serdijn

Journal of Applied Research and Technology
- Associate Editor: Jose Silva-Martinez

IEEE Sensors Journal
- Associate Editor: Ralph Etienne-Cummings

International Journal of Low-Power Electronics
- Associate Editor: Wouter Serdijn

IEEE Journal of Solid-State Circuits:
- Associate Editor: Un-Ku Moon

Books and book chapters


Ramesh Harjani (Editor), Topics in High-Speed Mixed-Signal Integrated Circuits, World Scientific Publishing Company, Oct. 2005


Journal publications


4. **Other professional recognitions**

2006 IEEE Gustav Robert Kirchhoff Award: Gabor Temes
Fulbright Fellowship Award: Ralph Etienne-Cummings
IEEE Distinguished Lecturer: Orly Yadid-Pecht

5. **2006-2007 planned activities**

ASPTC remains strongly committed to promote CAS interests in the ASP field, and assist with organizing and coordinating CASS-sponsored activities, such as ISCAS 2006. We will continue to seek close working relationships with other CASS technical committees in co-organizing events of interdisciplinary nature, as we have done for special sessions and tutorials at ISCAS and MWSCAS in recent years. We will also maintain a broader influence in other societies such IEEE-CS and IEEE-SSCS. In 2006, ASPTC will renew the possibility of annual special issue, preferably in CAS-I or CAS-II, if not in other journals such as Analog Integrated Circuits and Signal Processing.

*Un-Ku Moon, Chair*
*April 17, 2006*